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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,984	11/05/2001	Michael Baentsch	CH920000018US1	7655
25259	7590	04/20/2006	EXAMINER	
IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 RESEARCH TRIANGLE PARK, NC 27709			SON, LINH L D	
			ART UNIT	PAPER NUMBER
			2135	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/992,984	BAENTSCH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Linh LD Son	2135	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,3-7,9,10,12,14-17 and 19 is/are rejected.
- 7) ☒ Claim(s) 2,8,11,13 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. This Office Action is responding to the Amendment received on 02/06/06.
2. Claims 1-19 are pending.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112 Second because the claim language recites a "first processes" and a "second processes". Examiner is confused of how the "first and second processes" are linked to the means for language verifying a Java Card CAP file.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 10 is rejected under 35 U.S.C. 112 first because the claim is directed to the single means claim. See MEPE 2164.08(a).

**2164.08(a) Single Means Claim**

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to *Hyatt* is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-3, 7-8, 10-13, and 17-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
9. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete,

Art Unit: 2135

useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

10. Claims 1-3, and 7-8 consist solely of methods without practical application and tangible result in the technological arts or simply manipulate abstract ideas without practical application in the technological arts.
11. Claims 10-13, and 17-19 consist solely a system of software program per se. Applicant needs to make appropriate correction to overcome the 35 U.S.C. 101 rejection.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2135

13. Claims 7 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by BALASSANIAN, US Patent No. 6324685.

As per claims 7 and 17:

BALASSANIAN discloses "A method for language verification of a reduced file derived from an original file, the reduced file conserving original semantics, said method comprising:

- a) a conversion step for converting said reduced file (intermediate code) into a corresponding converted file (optimized code) that is semantically identical to said reduced file" in (Col 3 lines 9-28, Col 5 lines 1-25, Col 5 line 65 to Col 6 line 6); and  
"b) a language-verification step for verifying said converted file" in (Col 5 lines 25-53).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2135

15. Claims 1, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over BALASSANIAN, US Patent No. 6324685.

16. As per claims 1, 10, 12:

BALASSANIAN discloses "A method for language verification of a Java card CAP file created from an original Java code file, comprising: a) a conversion step for converting said Java card CAP file into a corresponding converted Java code file that is semantically identical to said Java card CAP file" in (Col 3 lines 9-28, Col 5 lines 1-25, Col 5 line 65 to Col 6 line 6); and b) "a language-verification step for verifying said converted Java code file for compliance with Java language specifications" in (Col 5 lines 25-53).

However, BALASSANIAN does not specifically disclose "JAVA card CAP file".

Nevertheless, BALASSANIAN does disclose the program code is the Java Source applet code (Col 3 lines 29-24). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify BALASSANIAN to implement the conversion process to convert the JAVA card converted applet file into another format (Col 5 lines 1-25).

Art Unit: 2135

17. Claims 3, 9, 11, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over BALASSANIAN in view of SCHWABE et al, US Publication No. 2003/0028686A1, hereinafter "SCHWABE".

18. As per claims 3, 14, and 19:

BALASSANIAN and SCHWABE disclose "A method for language verification of a Java card CAP file according to Claims 2, 13, and 18, wherein said mapping sub-step is performed using a referenced Java export file which is available as a result of creating said Java card CAP file from said original Java code file" in (Para 0043-45 and 0049).

19. As per claim 9:

BALASSANIAN and SCHWABE disclose "A method for language verification of a reduced file according to Claim 8, wherein said mapping sub-step is performed using a referenced difference file which is available as a result of deriving said reduced file from said original file" in (Para 0043-45, and 0056)

20. Claims 4-6, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over BALASSANIAN in view of Levy et al, US Publication No. 2004/0068726A1, hereinafter "Levy".



21. As per claims 4, and 15:

BALASSANIAN discloses "A method for language verification of a Java card CAP file according to Claims 1 and 12". However, BALASSANIAN is silent on "the method further comprising: c) a signature step for creating, after verification of said converted Java code file in said language verification step, a second cryptographic signature file". Nevertheless, Levy discloses the "Virtual Machine with securely distributed bytecode verification" invention, which include a method of creating the signature for verification in (Para 0025). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the method of Levy in to BALASSANIAN invention for use to authenticate the CAP file for authenticity.

22. As per claims 5 and 16:

BALASSANIAN discloses "A method for language verification of a Java card CAP file according to Claims 4 and 15". However, BALASSANIAN is silent on "a method, further comprising: d) a loading step for loading the second cryptographic device together with the Java card CAP file, signature file to a storage". Nevertheless, Levy discloses the method in (Para 0029). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the method of Levy in to BALASSANIAN invention for use to authenticate the CAP file for authenticity.

Art Unit: 2135

23. As per claim 6:

BALASSANIAN discloses "A method for language verification of a Java card CAP file according to Claim 4". However, BALASSANIAN is silent on "a method, wherein the second cryptographic signature file is cryptographically verifiable, said method further comprising: e) an executing step for executing cryptographic verification said Java card CAP file upon a positive". Nevertheless, Levy discloses the method in (Para 0029). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the method of Levy in to BALASSANIAN invention for use to authenticate the CAP file for authenticity.

### ***Response to Arguments***

24. Applicant's arguments filed 02/06/06 have been fully considered but they are not persuasive.

25. As per argument in the last paragraph on page 9 bridging to page 10, Applicant argues that Balassanian teaches the original code taught by Balassanian is program code and the code that is verified is "a common intermediate pseudo-binary version of the source applet code". In Col 5 lines 15-25, Balassanian teaches a process of transforming a first converted intermediate code and put out an second converted intermediate program code, and in the transformation process, it also does the verification of the second converted intermediate

Art Unit: 2135

program code. The first converted program code is actually a converted applet program (in Col 5 lines 10-15). It is obvious that Balassanian discloses the claimed invention of claims 1, 10, and 12 and clearly anticipated claims 7, and 17.

26. Therefore, the rejection basis dated 11/04/05 is maintained.
27. However, since Examiner has added new rejections under 35 U.S.C. 112 2<sup>nd</sup> and 35 U.S.C. 101, this Office Action will remain a Non-Final Rejection.

***Allowable Subject Matter***


28. Claims 2, 8, 11, 13, and 18 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son  
Examiner  
Art Unit 2135

  
HOSUK SONG  
PRIMARY EXAMINER